

# Too Good To Throw Away!

City of Tucson  
Recycling Education Program



**Pre- & Post-Visit Activity Booklet  
Grades 1-2**

## Dear Teacher,

Welcome to **Too Good To Throw Away!**, the City of Tucson's NEW recycling education program. Do you know that every day the average Tucsonan produces over four pounds of trash? Do you also know that almost half of that could be recycled or composted?

**Too Good To Throw Away!** offers students an opportunity to learn about and practice the 3Rs: reduce, reuse, and recycle—and to have FUN in the process. These activities provide practical knowledge and skills that will help your students make intelligent decisions now and in the future.

### This three-part program includes:

- One pre-visit activity (60 minutes) to introduce students to the waste situation in Tucson and the 3Rs! (Doing this activity ensures that students get the most out of the visit from the classroom presenter.)
- A 45-minute visit from a specially trained presenter.
- Two post-visit activities to help students practice applying what they learned from their special guest.

### To prepare for the presenter's visit, please:

- Reserve a room large enough to accommodate all of your students standing in a circle.
- Have a table (or two desks pushed together) cleared for presentation materials.
- Have a TV/VCR in the room.
- Review the Teacher Background Information and the enclosed brochures.
- Consider conducting Activity #1 to ensure that the students get the most out of the visit from the classroom presenter.

If you have any questions about what is recyclable in your area, check the "What Can We Recycle?" section of the Teacher Background Information. Or contact us at: [recycle@ci.tucson.az.us](mailto:recycle@ci.tucson.az.us) or (520) 791-5000. If you have any questions regarding this or other outreach programs, please call us at (520) 791-3175. TUSD teachers interested in helping to start commingled recycling at your school, contact the Natural Resources Manager, TUSD at (520) 225-4673. All other teachers (Sunnyside USD, Tanque Verde USD, Flowing Wells USD, etc.) please contact City of Tucson Environmental Services.

Thank you for teaching **Too Good To Throw Away!**

Waste Reduction Staff  
City of Tucson  
Environmental Services  
[www.tucsonrecycles.org](http://www.tucsonrecycles.org)

Sponsored by:  
Arizona Department of Environmental Quality  
Recycling Program and  
City of Tucson Environmental Services



For more information or additional copies of this packet, please contact:  
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# Too Good To Throw Away!

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**Pre-Visit Activity #1:\***

**Know Your 3Rs! Vocabulary Lesson and Secret Code** . . . . . Page 9

- 👉 Students learn to define important recycling vocabulary and decode a secret message.

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**Post-Visit Activity #2:\*\***

**Recycle Today! Mini-Poster Activity** . . . . . Page 18

- 👉 Students discuss ways to reduce the world of waste and create a mini-poster that makes sorting trash from recyclables easy.

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**Post-Visit Activity #3:\*\***

**Race to the Moon with a Recycool Rocket**

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- 👉 Students build a rocket ship, a robot, or an imaginary animal out of once-used materials.

\*This activity works best BEFORE the special visit from the classroom presenter.

\*\*These two activities reinforce and expand learning following the classroom visit by the presenter.

## Teacher Background Information

### A World of Waste

**W**hat is **solid waste**? Also referred to as trash, rubbish, refuse, or garbage, solid waste means waste material that is not liquid or gas. These lessons focus on municipal solid waste (MSW), which includes household, commercial and institutional waste, but not wastes from mining, agriculture, silviculture, demolition debris, and a variety of sludges. The term “waste” has interesting connotations. It can refer to something leftover or something not used wisely. Much that is considered waste could actually be used wisely.

Solid waste is a serious issue in the United States. The U.S. leads the world in the production of municipal solid waste. Even compared to other wealthy industrialized nations such as Japan or countries in Europe, we generate twice as much solid waste per capita. The average American produces about 4.4 pounds of garbage each day! In 1960, that figure was 2.6 pounds. This is expected to increase to 4.8 pounds per person per day by the year 2010.

Recycling has been growing steadily for over 20 years. From 1980 to 1990, the U.S. almost doubled its recycling rate from 9 percent to 17 percent. In 1995, our country’s average recycling rate was over 25 percent, and by 2000, it was 30 percent. Tucson is way below average. At Tucson’s Los Reales landfill, more than 1,500 tons of garbage arrive every day, much of it recyclable. The City of Tucson spends money to bury material it could be selling to recycling companies. The good news is that the *Tucson Recycles* program (once-a-week trash and recycling collection) diverts more of our waste from the landfill. Eligible households have a 60 or 90 gallon blue barrel for recycling, the types of recyclables accepted

has increased, and all recyclables are collected together, then sorted at a local facility. Tucson’s recycling rate has increased from 9% to 23% since the *Tucson Recycles* program was implemented in 2002. Recycling is much more than an alternate means of waste disposal. Recycling is about conserving natural resources, reducing our use of energy and materials, minimizing pollution, and more.

### What are the “Three Rs”?

**I**n a waste reduction context, the “Three Rs” refer to **reduce, reuse, and recycle**. These are the three most basic, important ways to reduce waste, conserve natural resources, and decrease our impacts on the natural world. Reducing, reusing, and recycling often save money, too.

It is important to recognize that the order cited—reduce, reuse, recycle—is *not* arbitrary. Some people tend to think of recycling as a central focus and of

reducing and reusing as less important, but this is not a correct understanding. Reducing is actually the most efficient way to conserve resources. Reusing is second in efficiency. Recycling is important, but is not as efficient as reducing and reusing.

Recycling of course involves a cycle. For recycling to be successful, we need to complete the cycle, or “close the loop,” by buying recycled goods. Although confusing, it’s important to learn to distinguish between the “made from recycled” symbol, which is a trio of light chasing arrows on a dark circle background, from the “recyclable” symbol, which is a simple trio of chasing arrows, with no dark background. A “made from recycled” product is actually made from materials that have been used before.



## REDUCE

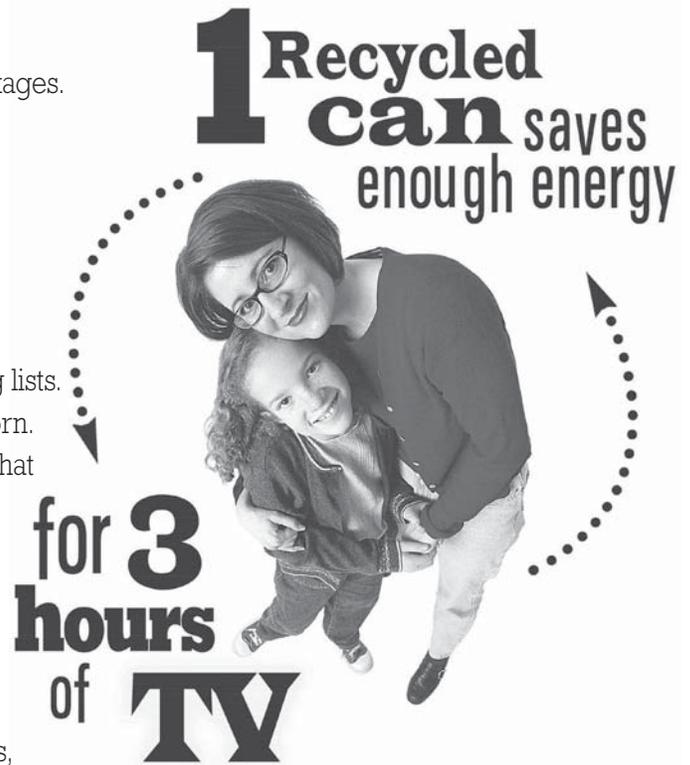
- Prevent waste; buy only what you really need.
- Purchase products you use regularly in large packages.
- Purchase products in less packaging.
- Purchase concentrates and bulk goods.
- Buy products in refillable packaging.
- Borrow, loan, rent, lease, or share when possible (books, tools, etc.).
- Use both sides of paper.
- Take action to get your name deleted from mailing lists.
- Repair instead of replace something broken or worn.
- Buy good quality, durable products fabricated so that they can be repaired.
- Take good care of your things so that they last.

## REUSE

- Choose reusable rather than disposable goods (napkins, mugs, razors, sponges, etc.).
- Purchase used goods (furniture, books, music, toys, clothes, etc.).
- Sell or give away goods you no longer want or need.
- Use the back of old paper as scratch paper.
- Use glass jars, plastic tubs, water bottles, lunch bags, etc. again and again.
- Use leftover materials to make something different (scrap lumber to build a bat house or doll house).

## RECYCLE

- Recycle as much as possible through community collection programs, either curbside or at drop-off locations.
- Adjust your purchasing habits to buy items in packages that are recyclable in your area.
- Keep an eye out for other special recycling programs, such as opportunities to recycle copier or computer printer cartridges through an office supply, Christmas tree collection programs, and so on.
- Remember to buy recycled! Look for products and packaging with recycled content.
- Help “nature’s recycling” by composting kitchen and yard waste.



## What Can We Recycle?

The *Tucson Recycles* program means that we can recycle a lot in Tucson!  
See the list below.

### Detailed Blue Barrel Recyclables List:

All these items also accepted at City's 16 neighborhood recycling centers.



- **Paper:** (no need to remove staples or labels)
  - White and colored (no neon bright colors), coated and non-coated paper
  - Open mail (with non-paper items removed; window envelopes and labels OK)
  - Adding machine tape, accounting ledgers, tabulating and time cards
  - Pamphlets, brochures, advertising flyers, posters
  - Booklets and magazines and catalogs (less than 1/2" thick)
  - Carbonless multi-forms (i.e., NCR paper)
  - Paper from legal, steno, note and message pads; sticky (Post-It) notes
  - Fax and telex sheets, computer and copy paper
  - Manila or pastel file folders (no brown, dark green or neon)
  - Shredded paper in a secured, clear plastic bag (please put white paper in a separate bag if possible; this is the only time plastic bags should go in the recycling container).

- **Paperboard/chipboard**

(like cereal or stationery boxes. Exception: no paperboard with metallic and wax coating)

- **Phonebooks**

- **Fiberboard**

(like paper egg cartons and some packing material)

- **Milk and juice cartons and drink boxes**

(coating is OK because these are very high quality paper)

- **Newspaper and brown bags**

- **Corrugated cardboard**

(flatten and cut as needed to fit in container)

- **#1 and #2 plastic bottles & jugs**

with necks or screw-on lids (no tubs, pails or other plastics)

- **Steel and tin cans**

(including non-hazardous product aerosol cans)

- **Aluminum cans**

- **Glass food and beverage containers**

**Reminder:**

If it is **not on the list**, or if it takes **too much water to clean**, it goes in the garbage!

**The success of *Tucson Recycles* depends on two factors:**

- **Quality** of the recycled materials, and
- **Efficiency** of the collection.

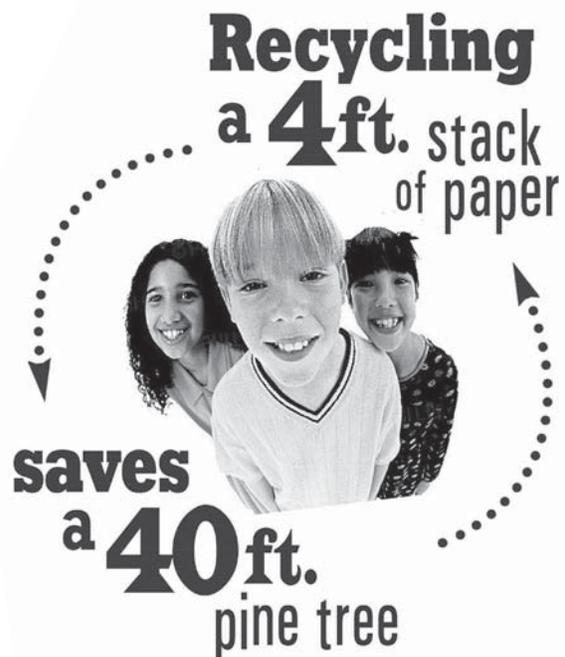
It is the responsibility of each homeowner to follow these recommendations which allow for the best separation and eventual use of the recycled materials.

**Tips:**

- Make sure materials are clean, empty and dry and have no food or beverage residue.
- Lightly rinse—throw very dirty items in the garbage.
- All recycling goes into container together—no sorting.
- Do not flatten cans, jugs or bottles; leave labels on.
- Bottle caps can be recycled on or off.
- Put items in container individually, not inside of boxes, plastic bags, etc.
- Please do not overfill container (there is no charge for a second blue recycling barrel).
- Set out the Blue Barrel for collection when it is more than half full. Having the truck stop for nearly-empty containers increases fuel consumption and air pollution.

**Do NOT Recycle:**

- tissue paper; paper towels; carbon paper; photographic paper; paper plates and cups; paper ream wrappers; blueprints; glued binders
- plastic bags or packaging; plastic chairs, blinds, gutters, toys, etc.
- newspapers with twine, straps or rubber bands
- electronics, computers, rechargeable batteries
- auto parts
- light bulbs, window glass, mirrors, ceramics or crystal
- medical supplies or containers
- construction and finishing materials and products
- herbicide, pesticide, automotive, chemical or other hazardous product containers
- green (yard) waste
- food waste
- pet food bags with plastic lining



## Arizona Department of Education Academic Standards

The *Too Good to Throw Away!* program for grades 1-2 addresses the following Academic Standards. (Complete versions of the Academic Standards are available at <http://www.ade.state.az.us>.)

<b>SCIENCE STANDARDS</b>	ACTIVITY #1	ACTIVITY #2	ACTIVITY #3	PRESENTATION
<b>SC01-S1C3-01</b> Organize (e.g., compare, classify, and sequence) objects, organisms, and events according to various characteristics.		✓		✓
<b>SC01-S6C1-03</b> Identify common uses (e.g., construction, decoration) of basic earth materials (i.e., rocks, water, soil).				✓
<b>SC01-S6C1-04</b> Identify the following as being natural resources: air, water, soil, trees, wildlife.	✓	✓		✓
<b>SC01-S6C1-05</b> Identify ways to conserve natural resources (e.g., reduce, reuse, recycle, find alternatives).	✓	✓	✓	✓
<b>SOCIAL STUDIES STANDARDS</b>				
<b>3SS-F2</b> Identify natural and human characteristics of places and how people interact with and modify their environment.				✓
<b>4SS-F1</b> Describe how scarcity affects students' daily lives.				✓
<b>LANGUAGE ARTS STANDARDS</b>				
<b>LS-F1</b> Use effective vocabulary and logical organization to relate or summarize ideas, events and other information.	✓	✓		✓
<b>VP-F3</b> Access, view and respond to visual forms such as computer programs, videos, artifacts, drawings, pictures and collages.	✓	✓		✓
<b>VP-F4</b> Interpret visual clues in cartoons, graphs, tables and charts that enhance the comprehension of text.	✓	✓		

## ***Pre-visit Activity #1: Know Your 3 Rs!*** **Vocabulary Lesson**

### **Overview:**

Students decode a secret message and learn to define important recycling vocabulary.

### **Arizona Department of Education Academic Standards:**

Please refer to the Arizona Department of Education Academic Standards section for the ADE standards addressed by this lesson.

### **Objectives:**

Students will be able to:

- ☞ define and use recycling vocabulary
- ☞ state that almost half of what we put in our landfill could be reused or recycled
- ☞ identify four alternatives to trash disposal: reduce, reuse, recycle, and compost

### **You will need:**

- one photocopy of each of the six recycling vocabulary images
- one photocopy of the six vocabulary words and their definitions (cut into strips as indicated)
- one photocopy for each student of the Know Your 3Rs! Secret Code

### **Directions:** (estimated time 30 minutes)

#### **1. Review vocabulary**

- Hand out the recycling vocabulary images to six student volunteers.
- Hand out the vocabulary word strips to six other student volunteers.
- Have the first six students hold up their images while the other six students read their words and definitions out loud.
- Have all students think of their own examples for each word and its definition.

#### **2. Build a bulletin board**

- Create a bulletin board about recycling using the enclosed brochures, images, and vocabulary.

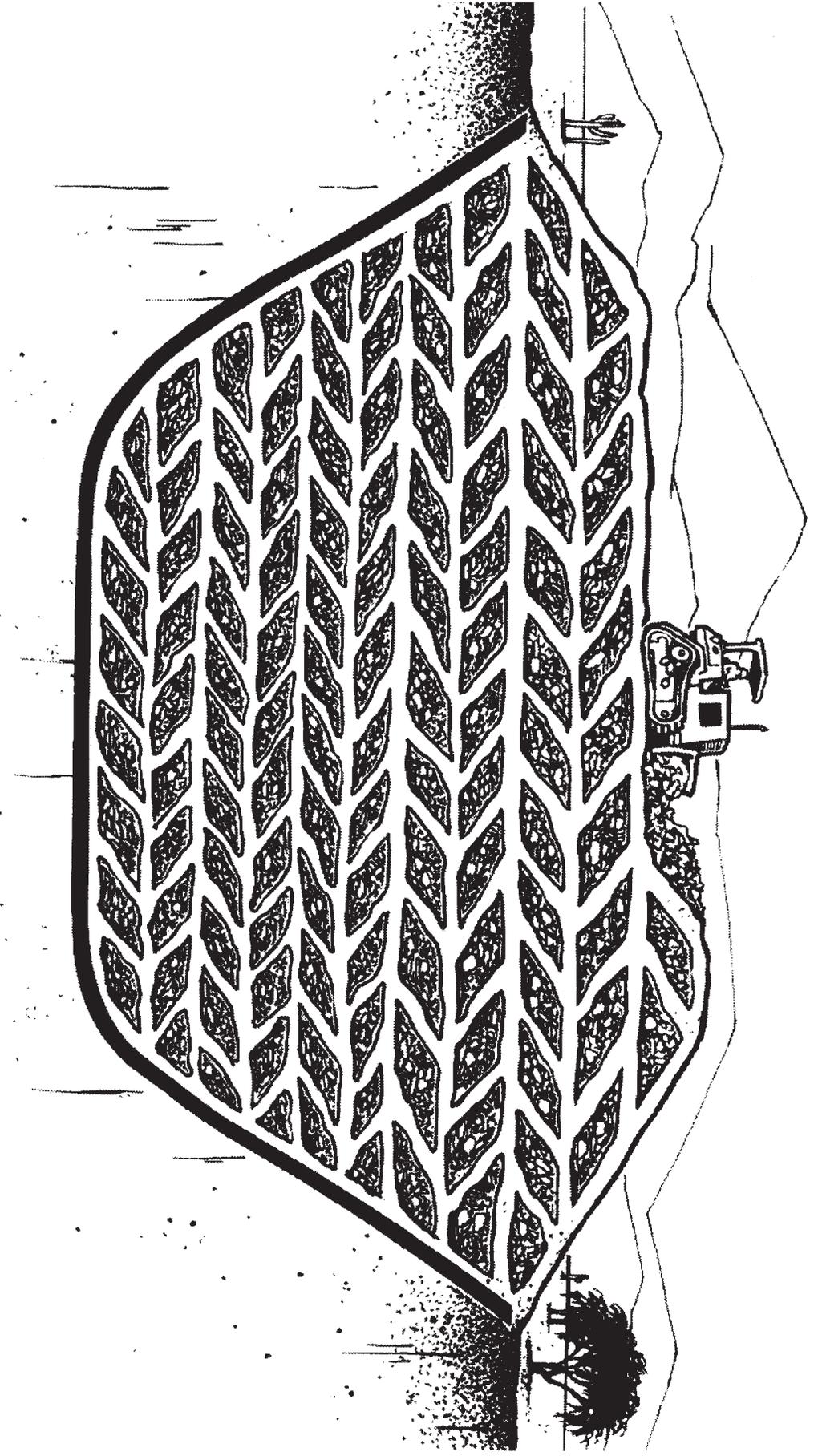
#### **3. Decode the message**

- Hand out the **Secret Code** pre-visit activity page to each student so that they can uncover the hidden message.



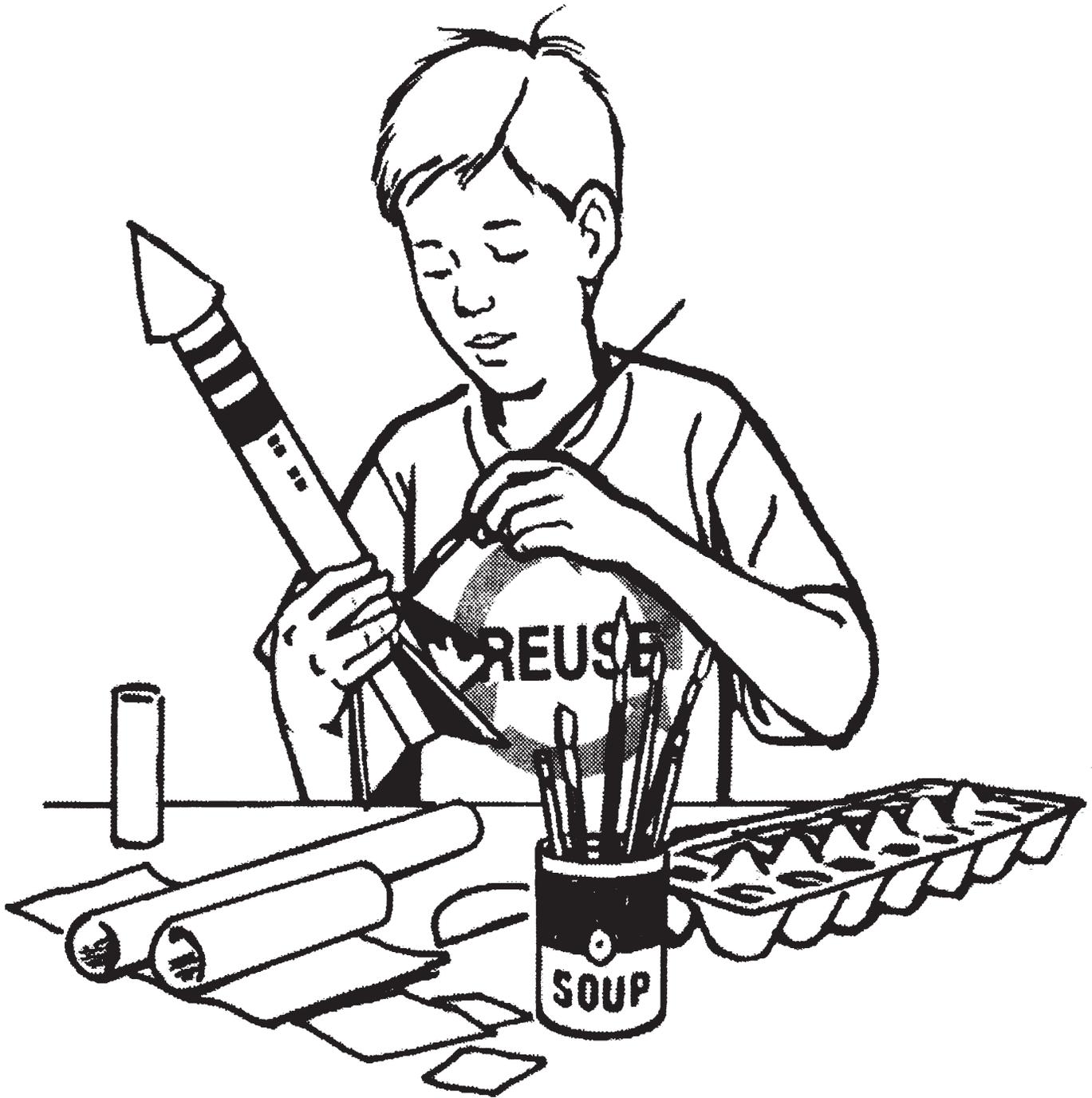
# natural resources

# Landfill





reduce



# reuse



recycle



# compost

## Know Your 3 Rs Vocabulary

**Note to Teachers:** Copy on card stock if available and cut along dotted lines.



**Natural Resources** (*noun*): Raw materials and energy that we get from nature: land, water, trees, sunshine, and minerals. Everything comes from natural resources. For example, this piece of paper came from a tree.



**Landfill** (*noun*): The place where trash is taken and buried in a special pit lined in plastic. Almost half of the things that end up there could have been reused, composted, or recycled.



**Reduce** (*verb*): To buy or use less stuff or to throw away less trash. For example, you can use a cloth bag repeatedly instead of a plastic bag to carry home groceries.



**Reuse** (*verb*): To save something and use it over again for the same purpose or another purpose. For example, you could make a toy rocket out of old paper towel rolls.



**Recycle** (*verb*): To make something used into something new. When you run out of things to do with your cans and newspapers, you can recycle them so they go to companies that make new things from them. A recycled newspaper can be made into another newspaper or comic book.



**Compost** (*verb/noun*): To compost is a way to recycle food scraps and yard waste. You can compost things that were once part of a living plant. Banana peels, coffee grinds, grass clippings, and leaves can all go in a compost pile to eventually turn into rich soil.



# Pre-Visit Activity #1: Know Your 3 Rs! Secret Code

Hey Kids!

What does the Blue Barrel want to tell you? Decode the message below.

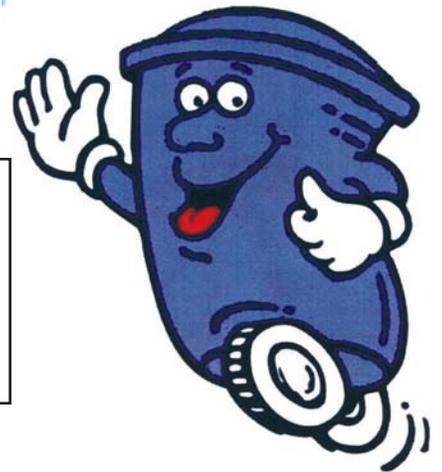
### Directions:

First, find the letters that match the symbols in the Secret Code Box.

Next, write the matching letters below the symbols. Good luck!

### SECRET CODE BOX:

R = ☺	S = 🔔
A = 📖	U = ★



### SECRET MESSAGE:

☺ED ★CE, ☺E ★🔔E, ☺E CYCLE TOD📖Y!  
 \_\_ED\_\_CE, \_\_E\_\_ \_\_E, \_\_ECYCLE TOD\_\_Y!

WHEN YO★ THROW LE🔔🔔 📖W📖Y,  
 WHEN YO\_\_ THROW LE\_\_ \_\_ \_\_W\_\_Y,

THE PL📖NT🔔 📖ND 📖NIM📖L🔔🔔HO★T  
 THE PL\_\_NT\_\_ \_\_ND \_\_NIM\_\_L\_\_ \_\_HO\_\_T

HOO☺📖Y!

HOO\_\_ \_\_Y!

## ***Post-Visit Activity #2: Recycle Today!*** **Mini-Poster Activity**

### **Overview:**

Students discuss ways to reduce the world of waste and create a mini-poster that makes sorting trash from recyclables easy.

### **Arizona Department of Education Academic Standards:**

Please refer to the Arizona Department of Education Academic Standards section for the ADE standards addressed by this lesson.

### **Objectives:**

Students will be able to:

- ☞ identify and list what can be recycled in Tucson
- ☞ discuss ways to organize a home recycling center

### **You will need:**

- “Here’s What to Recycle in Tucson” mini-poster, photocopied for each student
- scissors
- markers or colored pencils

### **Directions:** (estimated time 60 minutes)

#### **1. Get Real!**

Now that the students know how to recycle, it’s time to get real!

Ask the students:

- When we go home, how can we remember what to recycle in Tucson?
- What else can you do at home to make recycling easy and fun for the whole family?
- You may want to remind the students that recycling is something they don’t have to wait to be grown-ups to do. It’s something they can do right now to help save natural resources, such as trees, water, minerals, and desert plants and animals.
- Hand out the “Here’s What to Recycle in Tucson” color-me mini-poster to each student.
- Have students color the mini-poster and take it home to place near their family’s recycling barrel.

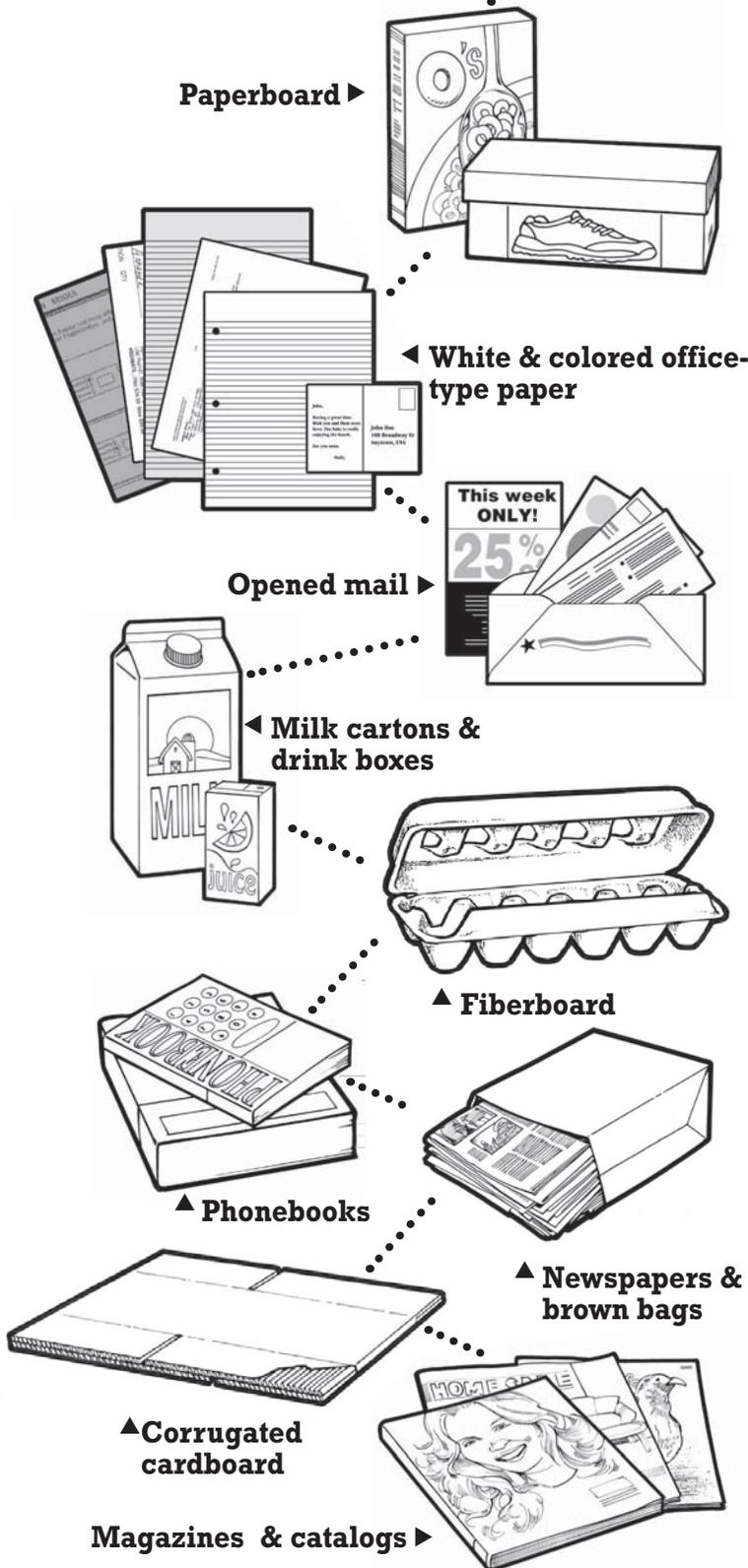
#### **2. Recycling is the First Step**

Ask the students:

- What might we do to reduce the amount of trash we produce as a class?
- As students brainstorm, write their ideas on the board.
- After a list has been created, lead the class into agreement on which strategies could make the most difference and prioritize the list. Some examples: using both sides of a piece of paper, buying only what we need, looking for products with the least amount of packaging, buying recycled products, giving books, toys and clothes you no longer need to charity or friends.
- Then take concrete steps to set these strategies in motion. For example, if “use back of old homework for scratch paper” is listed, set up a basket or box for the class to collect paper that is clean on one side.
- If “create a classroom recycling program” is listed, set up an appropriate container and collection schedule.
- Keep it simple and make it FUN!

# Here's What to Recycle in Tucson Mini-Poster

## Paper



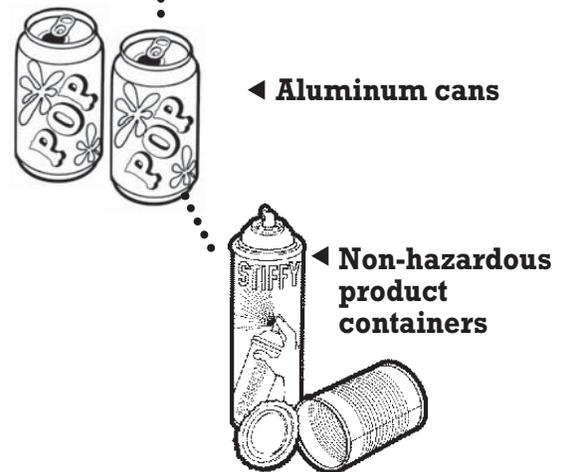
## Plastic



## Glass



## Aluminum & Other Metals



**Reminder:**  
If it is **not on the list**, or if it takes **too much water to clean**, it goes in the garbage!

## ***Post-Visit Activity #3: Race to the Moon with a Recycool Rocket*** **A Reuse-It Crafts Project**

### **Overview:**

Students build a toy rocket ship, a robot, or an imaginary animal, out of once-used materials.

### **Arizona Department of Education Academic Standards:**

Please refer to the Arizona Department of Education Academic Standards section for the ADE standards addressed by this lesson.

### **Objective:**

Students will be able to:

- ☞ demonstrate a fun, hands-on way to reuse “trash”

### **You will need:**

- an assortment of clean, used materials: tin/steel cans, tubes of all sizes, pie plates, aluminum foil, aluminum cans, corrugated cardboard, magazines, etc.
- tape or glue (packing tape works well)
- scissors for cutting tape
- thick markers (for naming rockets)
- pictures of rocket ships, robots, animals, etc. (optional)
- remember your camera!

### **Directions:** (estimated time 90 minutes)

#### **1. Discuss ways to reuse household items.**

##### **Ask the students:**

- “Does it make sense to use something once and then just throw it away?”
- Tell them that this activity demonstrates one fun way to reuse “trash.”

#### **2. Gather students into teams.**

- The size of the teams depends on number of students and/or materials.
- Offer suggestions of what they might make or let students imagine their own designs.
- Display pictures of various things they might make such as rockets or animals.

#### **3. Challenge the teams to create a rocket, a robot, or a rascal.**

- Split the materials fairly evenly between the teams.
- If you choose to do the rockets, you can integrate the activity with a history lesson about the space race in the 1960s.
- Give students time to design and build their creations.

#### **4. If you wish, ask students to create a label or sign about their creation.**

#### **5. Recycle leftovers.**

- Remind the students to recycle what they can of their rockets (or other inventions) when they are done playing with them!



Partially funded by:



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